

KENWOOD



L-D1 Instruction Manual
CD PLAYER

Introduction




Thank you for buying the Kenwood L-D1 CD Player.

Please read this manual carefully to ensure that you get the greatest possible use and satisfaction from your L-D1.

Keep this manual in a safe place for future reference.

Contents

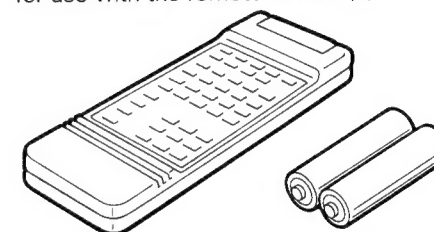
Caution: Read the pages marked  carefully to ensure safe operation.

 Before applying power	3	Names of parts	12	How to repeat playback	24
 Safety precautions	3	The DISPLAY key		Playing a track repeatedly	
 Important safeguards	4	Stand by mode of POWER switch		Playing a disc repeatedly	
About your new Kenwood L-D1	6	How to use the remote control	13	Playing a selected portion (Interval repeat)	
Before operation	8	Inserting the batteries		Indexed playback	
Handling discs		Operating the remote control		How to edit	28
Using discs		How to insert a disc	14	Editing	
Condensation		How to play a disc	16	Checking your editing	
Precautions when shipping or moving		Playing a disc		Playing your edited sequence	
How to set up your new L-D1	10	Pausing playback		Erasing all editing	
Adjusting the lid angle		Stopping playback		Program selection and editing	
Connecting the digital output cables		The TIME DISPLAY key		How to set the timer	30
Adjusting digital output levels		Playing your favorite track		Setting timed playback	
		The EMPHASIS indicator		The TIMER STAND BY function	
		How to program playback	20	Troubleshooting	31
		Playing a program (PGM mode)		Block diagrams	33
		Checking a program		Specifications	34
		Adding to a program			
		Modifying a program			
		Erasing a program			
		Inserting a space between tracks			

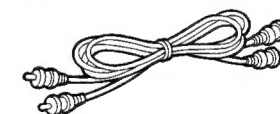
Accessories

Make sure that all accessories are put aside so they will not be lost.

Remote control unit (1)
AA dry batteries (R6/SUM-3)
for use with the remote control (2)



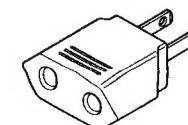
Audio cord (1)



Clamper (1)



AC plug adaptor (1)
(Except for some areas)
For the unit with a European
AC plug in areas other than
Europe.



Before applying power

⚠ Caution: Read this page carefully to ensure safe operation.

For Europe

Important!

Units shipped to Europe are designed for operation on 230 V AC only.

For the United Kingdom

Important!

Units shipped to the U.K. are designed for operation on 240 volts AC only.

The mains plug must be removed from the wall socket prior to any internal examination.

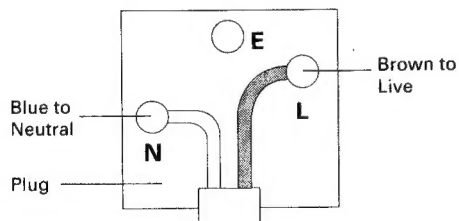
The wires in this mains lead are coloured in accordance with the following code:

Blue Neutral
Brown Live

The wires in this mains lead must be connected to the terminals in the plug as follows:

Wire colour Plug terminal marking

Blue N or Black
Brown L or Red



Notes: _____

1. If a 13-amp plug is used, this must be fitted with a 13-amp fuse.
2. If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal.

For other countries

Important!

Units shipped to countries not specified on the left-hand side are equipped with an AC voltage selector switch on the bottom panel. Refer to the following paragraph for the proper setting of this switch.

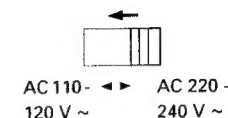
AC voltage selection

This unit operates on 110 - 120 or 220 - 240 volts AC. The AC voltage selector switch Type A or Type B on the bottom panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

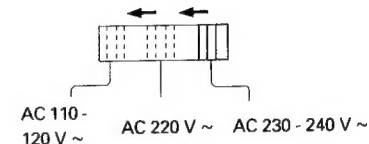
Note: _____
Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

AC voltage selector switch

Type A



Type B



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

Safety precautions

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN		CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.		
	THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.		

Important safeguards

⚠ **Caution:** Read this page carefully to ensure safe operation.

Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

1. **Power sources** – The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
2. **Power-cord protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
3. **Grounding or polarization** – The precautions should be taken so that the grounding or polarization means of this unit is not defeated.
4. **Ventilation** – The unit should be situated so that its location or position does not interfere with its proper ventilation.
To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls.
Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings.
5. **Water and moisture** – The unit should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
6. **Temperature** – The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).
7. **Heat** – The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.
8. **Electric shock** – Care should be taken so that objects do not fall and liquid is not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.
9. **Enclosure removal** – Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.
10. **Magnetic fields** – Keep the unit away from sources of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.
11. **Cleaning** – Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.
12. **Carts and stands** – An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



Note: _____
Item 3 is not required except for grounded or polarized equipment.

- 13. Nonuse periods** – The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.
- 14. Abnormal smell** – If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service center.
- 15. Damage requiring service** – The unit should be serviced by qualified service personnel when:
- A.** The power-supply cord or the plug has been damaged; or
 - B.** Objects have fallen, or liquid has been spilled into the unit; or
 - C.** The unit has been exposed to rain; or
 - D.** The unit does not appear to operate normally or exhibits a marked change in performance; or
 - E.** The unit has been dropped, or the enclosure damaged.
- 16. Servicing** – The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

**The marking of products using lasers
(Except for some areas.)**

**CLASS 1
LASER PRODUCT**

This label is attached to the rear panel and says that the component uses laser beams that have been classified as Class 1. It means that the unit is utilizing laser beams that are of a weaker class. There is no danger of hazardous radiation outside the unit.

Strömbrytarens POWER beredskapsläge

Indikatorn STAND BY tänds efter nätkabelns anslutning till ett vägguttag, oavsett strömbrytarens POWER till/frånslag. Detta anger att en liten mängd ström leds till komponenten som stöd för minnesinnehållet.

Detta läge kallas för beredskapsläget. Strömbrytaren på fjärrkontrollen kan användas för att slå på och av strömmen så länge indikatorn STAND BY lyser.

Virtanäppäimen (POWER) valmiustila (STAND BY)

Kun laitteen verkkojohto on liitetty pistorasiaan, valmiustilan merkkivalo syttyy riippumatta virtanäppäimen (POWER) asennosta (ON/OFF). Merkkivalo osoittaa, että laitteessa on hieman virtaa muistin sisältöjen ylläpitoa varten. Tätä tilaa kutsutaan valmiustilaksi. Kun valmiustilan merkkivalo (STAND BY) palaa, laitteen virta voidaan kytkeä ja katkaista kaukosäätimellä.

Afbrydertastens (POWER) STAND BY funktion

Når apparatets strømledning er tilsluttet en stikkontakt, lyser STAND BY indikatoren, uanset om der er tændt ved afbryderen på apparatet eller ej. Det angiver, at apparatet bliver forsynet med en ganske lille mængde strøm til opret-holdelse af hukommelsens indhold.

Denne funktion kaldes STAND BY. Når STAND BY indikatoren er tændt, kan strømmen til apparatet slås til og fra med fjernstyringsenheden.

PÅ/AV-knappens Stand-by funksjon

Når strømledningen til dette anlegget er satt i en vekselstrømskontakt, vil STAND-BY indikatorlampen lyse enten PÅ/AV-knappen er på- eller avslått. Dette betyr at en viss mengde strøm tilføres anlegget slik at innholdet i minnet ikke går tapt. Denne funksjonen kalles Stand-by. Når indikatorlampen for STAND-BY er tent, kan strømmen slås PÅ/AV fra fjernkontrollen.

Bescheinigung des Herstellers/Importeurs

**Hiermit wird bescheinigt, daß der/die/das
Digital-Plattenspieler**

L-D1

(Gerät, Typ, Bezeichnung)
in Übereinstimmung mit den Bestimmungen der
1046/1984

(Amtsblattverfügung)
funk-entsört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

KENWOOD CORPORATION

Name des Herstellers/Importeurs

About your new Kenwood L-D1

Top loading CD replay

To reduce the fluttering that results from the slipping and bending of ultra-light CDs, we've used a top-loading fixed turntable system where the turntable is fixed directly to the spindle motor. In a top-loading system, the labeled side of the CD is inserted downward. The turntable is machined out of aluminum to create a turntable of 130 mm in diameter which is fixed in place. A 100-gram clasper then holds down the whole surface of the CD and the turntable rotates. This single-unit design creates an inertial momentum more than 20 times than that obtainable from ordinary replay systems, thus resulting in steady play and increased stability.

And what's more, in a fixed table system, any warping in a disc is eliminated by the pressure holding the disc down onto the turntable, thus resulting in a disc surface incredibly close to an ideal plane surface. This system also makes it possible to reduce to the barest minimum the work that must be done by the servo to compensate the pickup track signal fluctuations due to disc warping and which could not be avoided under conventional replay systems. This also reduces fluctuations in power consumption resulting from changes in servo load and has helped us succeed in reproducing extremely bright and clear RF signals.

A high rigid mechanism chassis together with a tough steel frame cabinet to separate the front and rear chambers completely

To clearly separate the moving from the non-moving parts, a full-size turntable is mounted into a 4mm thick aluminum die-cast mechanism chassis which is fixed into an 8-mm thick extruded aluminum frame. The front panel consists of a 5 mm thick of extruded aluminum and the separator frame that supports the whole device is constructed of a steel plate 2 mm thick. The upper plate is made from a 3.8-mm thick extruded aluminum plate, and the top plates over the front and rear compartments are separated into two separate plates to create a system where radiation and vibration from each compartment are clearly separated to prevent interference.

A tough bridge design pickup formed by aluminum die casting

Supported by the tough, sturdy case, the pickup—the one moving part—is mounted on a strong, stable guide where it straddles the disc in a bridge structure that minimizes vibration. The heavy aluminum die-cast bridge pickup is controlled by a coreless motor that eliminates cogging and ensures smooth operation.

A brushless spindle motor with 8 terminals and 12 slots and a high rigid 6-mm diameter shaft

The increased weight and size of the turntable dramatically increases the level of performance of the spindle motor which drives the turntable. That's why the L-D1 uses an 8-pole 12-slot outer rotor brushless motor with a shaft of 6 mm in diameter developed originally for LD players for higher torque and less cogging. Originally developed to drive LDs (twenty times CDs in weight) which rotate a four to five times the speed of CDs, this high-performance spindle motor gives you better response in servo tracking and less shaft distortion due to speed fluctuation than that available from conventional CD spindle motors.

Glass epoxy circuit board fixed in place with steel studs

The printed circuit board containing the circuitry for the L-D1 has been made out of a glass epoxy board that virtually eliminates contraction, warping, and bending. Extremely reliable and with excellent wide-band frequency characteristics, glass epoxy is widely used in industrial applications. And what's more, nearly all the boards in the L-D1 are firmly fixed in place to steel plates 2 mm thick with tough steel studs to reduce the adverse effects of vibration and changes in environment.

Super C⁴ circuits for our initial-stage amplifier circuitry

In order to reduce the in-phase noise that has conventionally been thought of as an inevitable product of performance errors in the initial stage amplification process, we've used the same Super C⁴ (Constant Current Cascade Circuit) system in the initial amplifier circuitry of the L-D1 as that used in our high-performance L-A1 amplifier.

Independent digital and analog power transformers

The L-D1 uses independent power transformers to prevent interference between the digital circuitry and the analog demodulation circuitry. A back-up transformer has also been provided for the power supply that provides electricity to the microcomputer and fluorescent display to ensure a cleaner, purer source of power than that available in conventional systems.

A single bit D/A converter with independent channel bit streams for PDM conversion

We've used a single bit D/A converter with independent channel bit streams to perform PDM conversion in the D/A converter which forms the very heart of a CD player. And to reproduce even those fine and delicate sounds, we've installed independent channel switched capacitors.

High quality machined and pressed parts

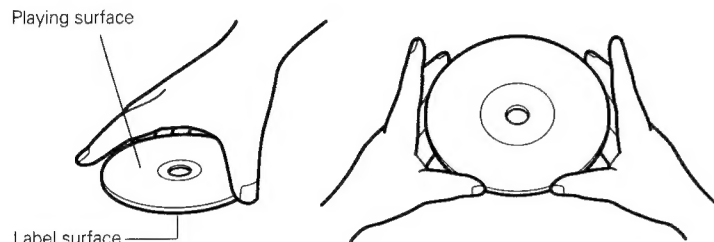
Those parts critical to operating or connecting the L-D1—the front panel, control knobs, pin jacks, and other moving parts—have all been made using high quality machined or pressed parts to ensure the greatest possible reliability and sturdiness.

Before operation

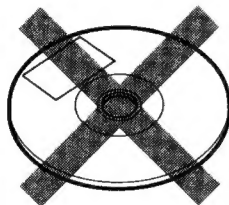
Handling discs

Handling your discs

- Always hold discs so as not to touch the playing surface.

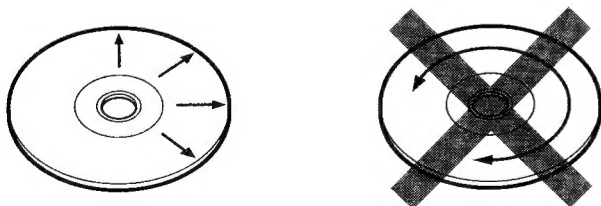


- Do not place tape, paper, or other coverings over the playing or label surfaces.



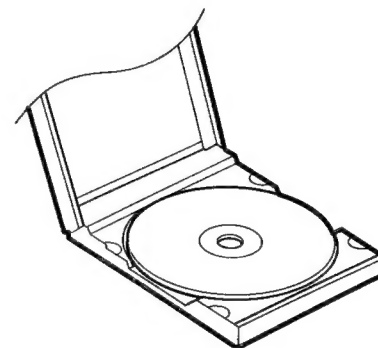
Cleaning your discs

- When a disc has been dirtied or smudged with fingerprints, wipe it lightly with a soft cloth, moving the cloth from the inside to the outside of the disc.



Storing your discs

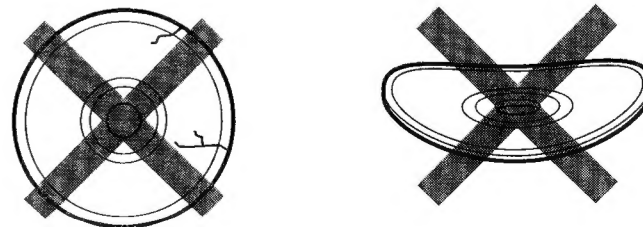
- If you do not intend to play a disc, remove it from the machine and place it in its case.



Using discs

Never use warped or cracked discs

- During playback, discs are rotated within the L-D1 at high speed, and chipped, cracked, or badly warped discs should never be used. Doing so may result in breakdown or in permanent damage to your machine.



COMPACT
disc
DIGITAL AUDIO

Condensation

Condensation refers to the formation of dew-like drops of water on cold surfaces from moisture in the air. Although this is a natural, normal phenomenon, if it happens on the inside of the L-D1, it could cause your equipment to function improperly or not at all. And while this does not mean that the system is broken, it does mean that you should wait a short while for the condensation to dry. Simply leave the machine with the power on and wait until it dries. At the most, this should require no more than a few hours.

Please be especially careful of condensation under the following conditions:

- When you have moved the unit from a cold place into a warm room, or to any other place where there is a large and sudden difference in temperature.
- When you have just turned on the heating.
- When you have just moved the machine from a room with strong air conditioning into a hot or humid room.
- When the difference in temperature inside and outside the machine is extreme and it would be easy for condensation to form.

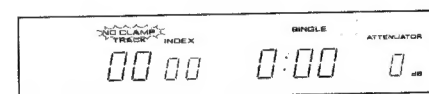
Precautions when shipping or moving

When shipping or moving the L-D1, please take the following precautionary procedure:

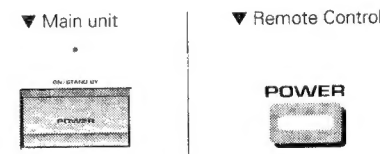
1. Remove the clumper.
2. Confirm that there is no disc inside the machine, and then press the **POWER** key to turn on the power.



3. Confirm that the display shows the following message.



4. Press the **POWER** key to turn off the power.



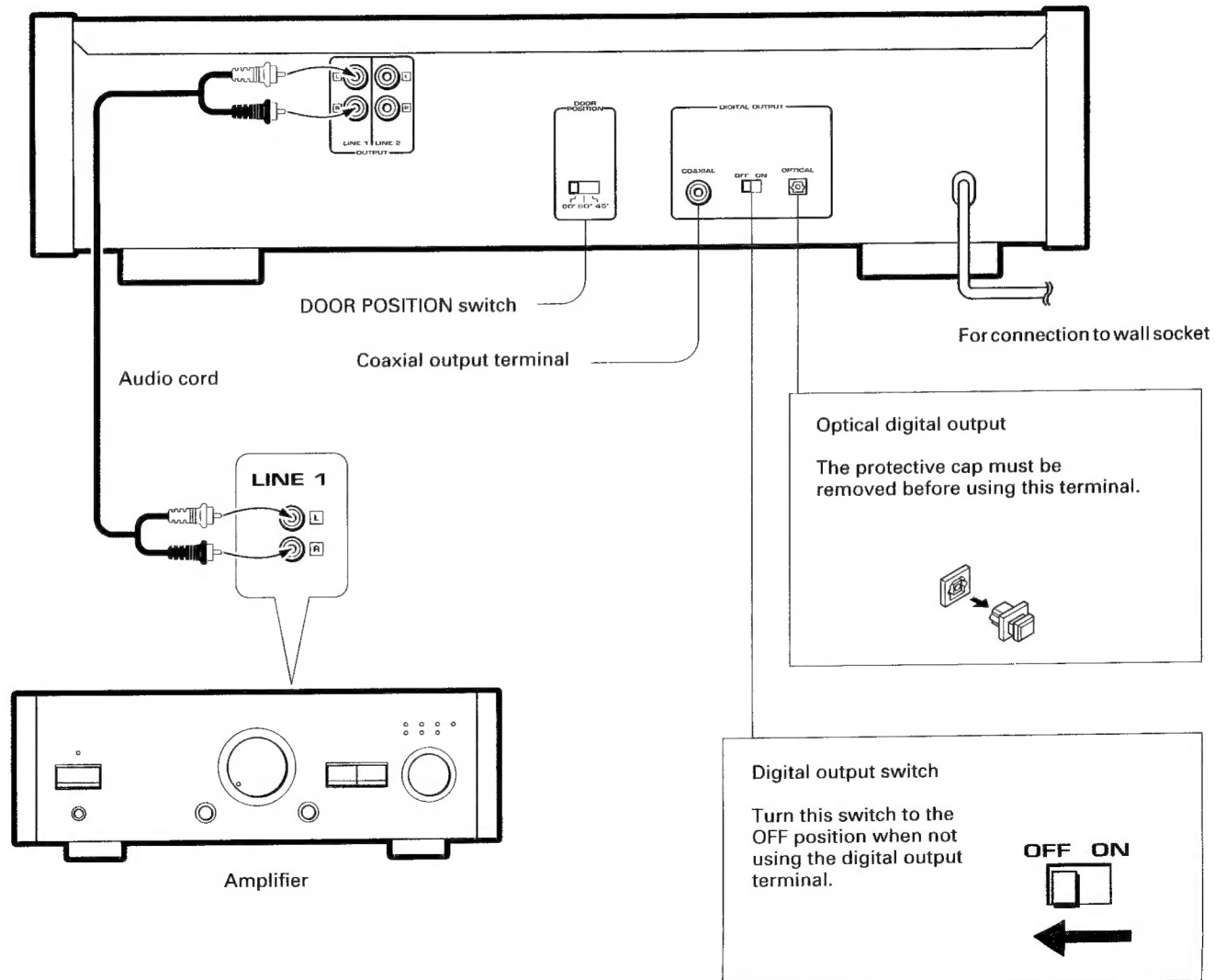
How to set up your new L-D1

Connect as shown in the diagram below.

Please read the manuals for the equipment being connected to the L-D1 before connecting.

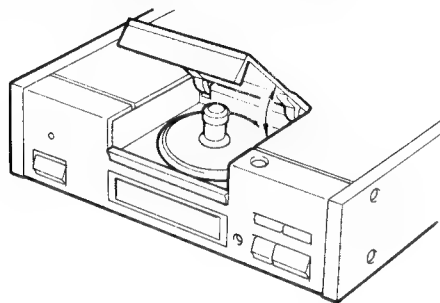
The power cord should not be plugged in until after all connections have been fully completed.

* Lines 1 and 2 output at the same level. You can adjust the output level by using the remote control. (See page 11.)



Adjusting the lid angle

You can select the angle at which the lid opens from 45°, 60°, and 80°, depending on the placement of the machine.

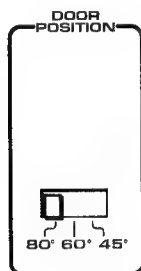


Note

- Make sure there is enough space above the machine, as specified below, so as not to obstruct the lid from opening and closing.

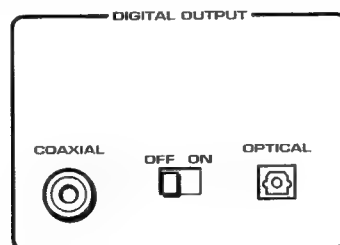
45 °	10 cm or more
60 °	13 cm or more
80 °	16 cm or more

Slide the **DOOR POSITION** switch to the lid angle you prefer.

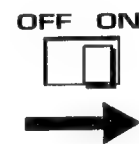


Connecting the digital output cables

The Kenwood L-D1 CD player has two output terminals: an optical output terminal and a coaxial output terminal. These terminals may be used to connect the L-D1 to audio components equipped with a digital input terminal. The cable used for the connection should be either a commercially available optical fiber or coaxial cable.



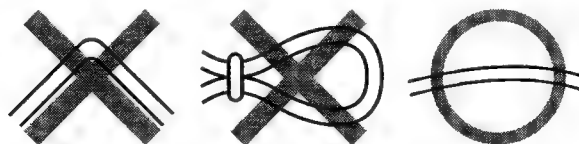
- Be sure to set the digital output switch to the ON position when using the digital output terminal.



Connecting optical fiber cables:

Insert the optical fiber cable straight into the terminal until you hear a slight clicking sound.

- Do not bend, fold, or coil the optical fiber cable.
- Not all optical fiber cables commonly sold may be used with the L-D1. If you have any trouble with the connections, please contact your Kenwood dealer or your nearest Kenwood sales office.



Adjusting digital output levels

Pressing the **OUTPUT UP/DOWN** key on the remote control raises/lowers the line output level of the L-D1 accordingly. Adjust the output of the L-D1 to match that of the rest of your A/V equipment.

- If you press the **OUTPUT UP/DOWN** key, you can adjust the output level from 0 to -40 decibels in 1 decibel units. If you hold down the **OUTPUT** key, you can continuously raise/lowers the output level in 1 decibel units.



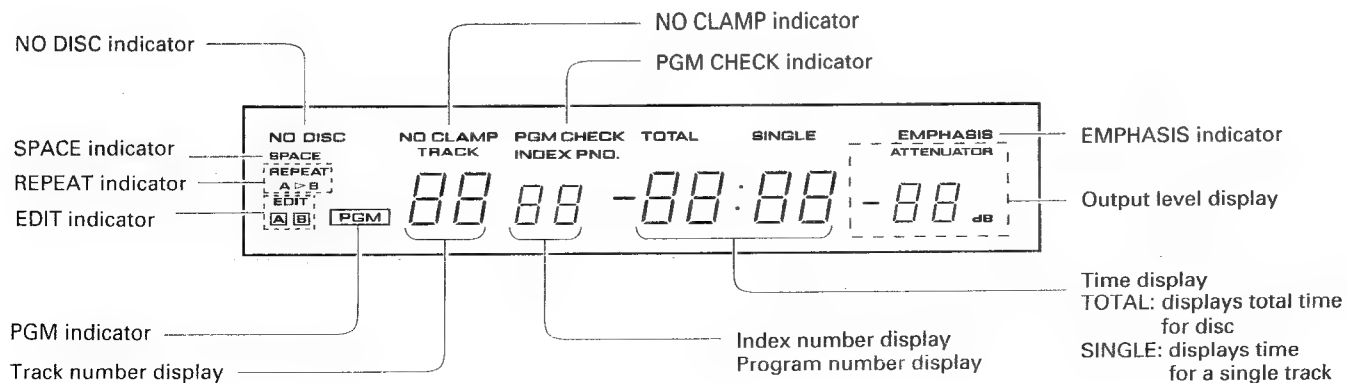
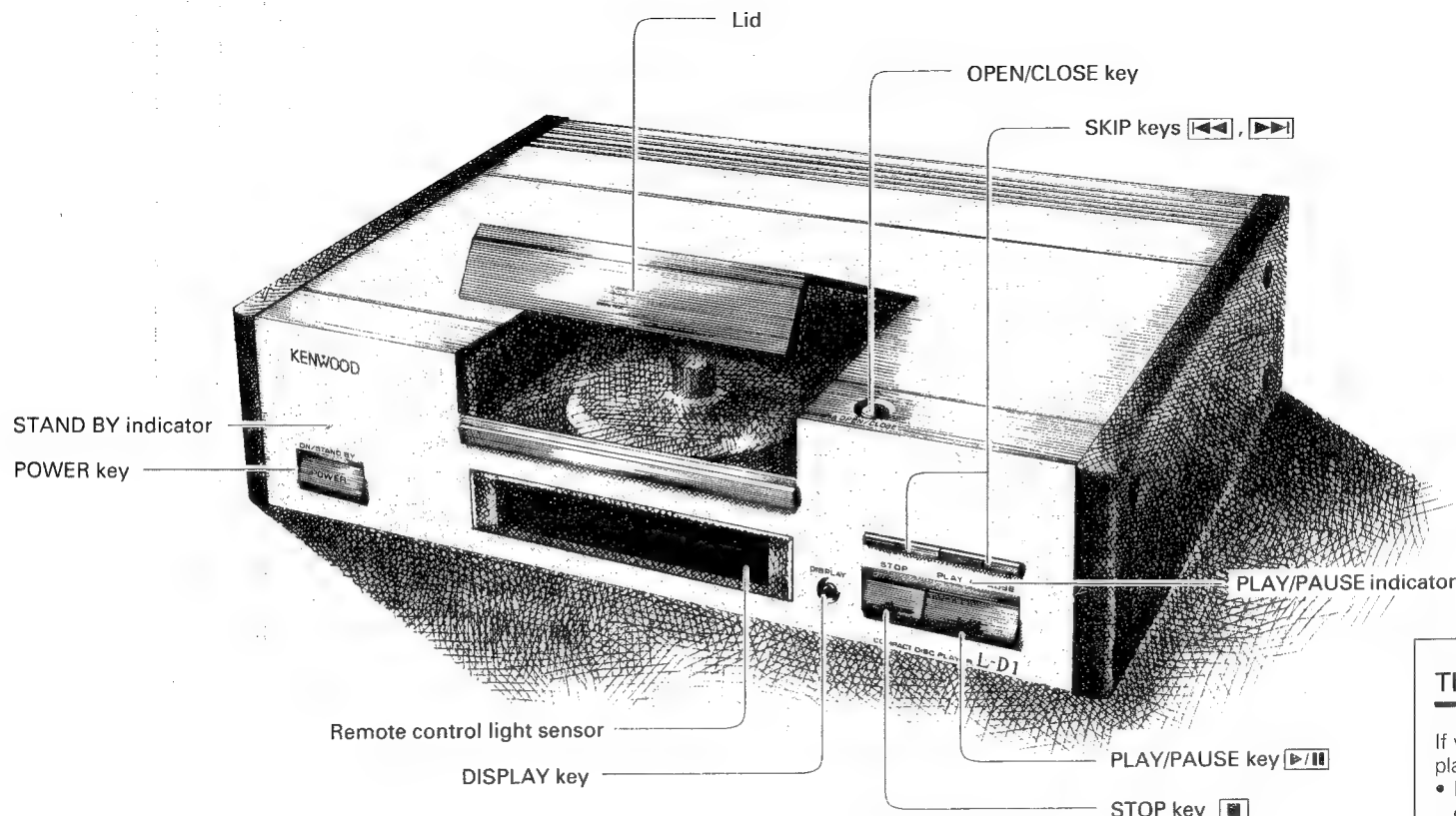
The maximum output level to which the L-D1 may be set is 0 dB.



Notes

- Please insert the connecting cords firmly into their sockets. Inserting these cords loosely may result in noise or the loss of sound altogether.
- When inserting or removing the connecting cords, always be sure to first remove the power cord from its socket. Inserting or removing the connection cords with the power cord in its socket may result in the faulty operation of or damage to the unit.

Names of parts



The DISPLAY key

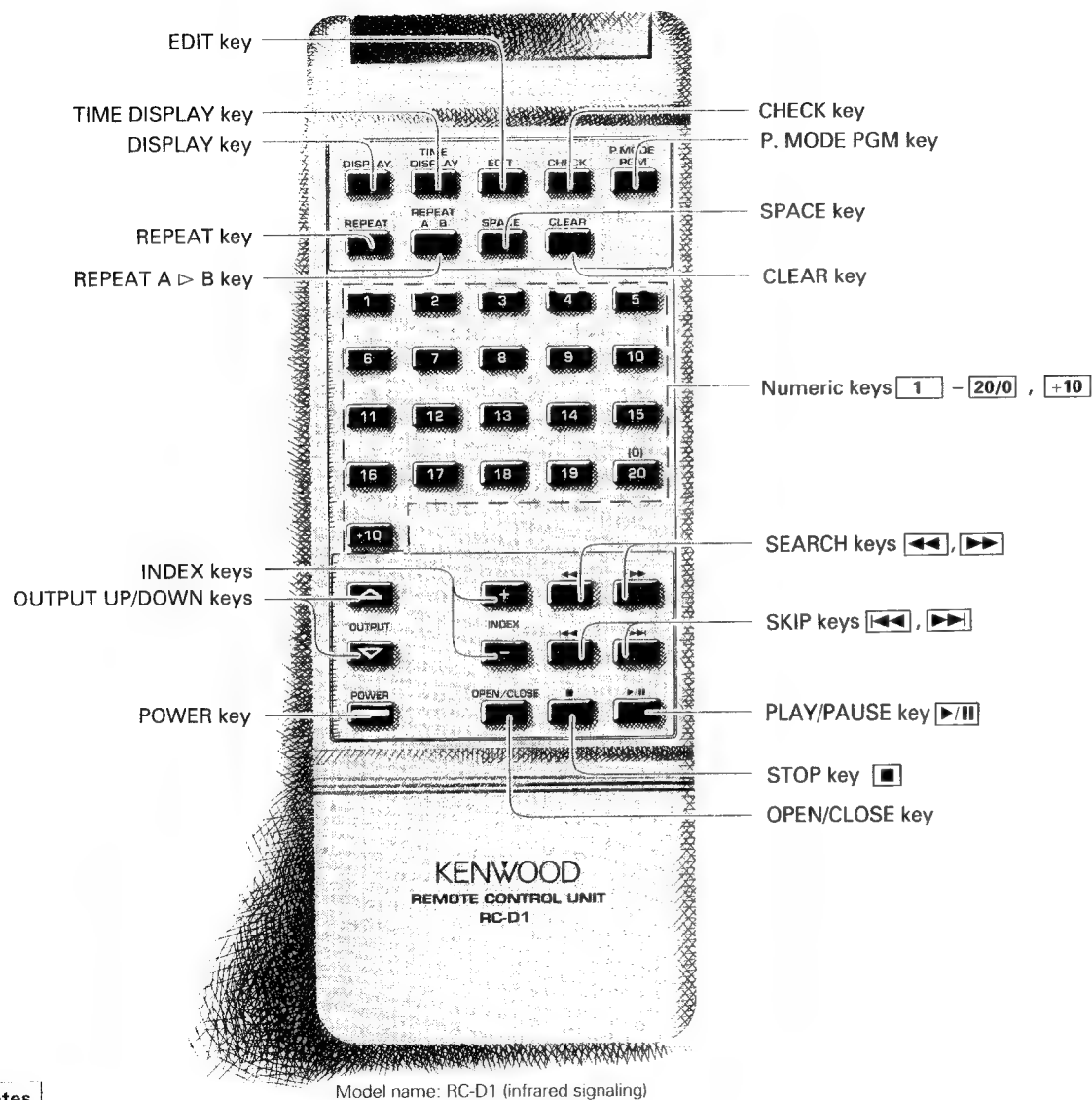
If you press the **DISPLAY** key while a disc is being played, the display switches on or off.

- If you press the **STOP** key with all the lights off, the display lights up. To turn off the display, first press the operation key then press the **DISPLAY** key once more.
- If you press the operation key with the lights off, the display lights up for approximately 2 seconds.

Stand by mode of POWER switch

When the power cord of this system is plugged into an AC outlet, the **STAND BY** indicator lights up regardless of the ON/OFF setting of the **POWER** switch. This indicates that a small amount of current is being supplied to the unit to back up the memory contents. This mode is referred to as the Stand By mode. While the **STAND BY** indicator is lit, the power of the system can be switched ON/OFF from the remote control unit.

How to use the remote control

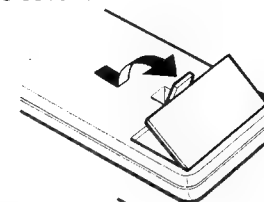


Notes

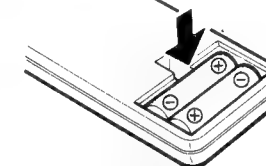
- The batteries included at the time of purchase are to be used for testing the operation of the L-D1 CD player, and may have a shorter life.
- If you find that you have to stand closer than usual to the main unit in order to use the remote control, please replace both batteries.
- Direct sunlight or high-frequency radiation from fluorescent lamps (inverter-type lamps, etc.) on the signal detector may result in the remote control failing to work properly. If this happens, please place the L-D1 in a location free of such interference to ensure proper operation.

Inserting the batteries

- 1 Open the cover at the bottom of the unit.



- 2 Insert batteries.

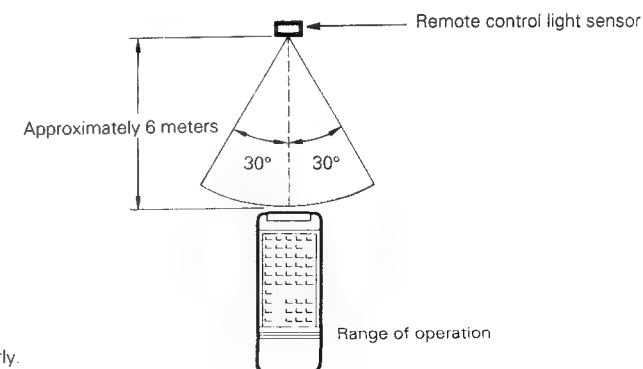


Line up two AA dry batteries (R6/SUM-3) with the +/- markings inside the remote control unit.

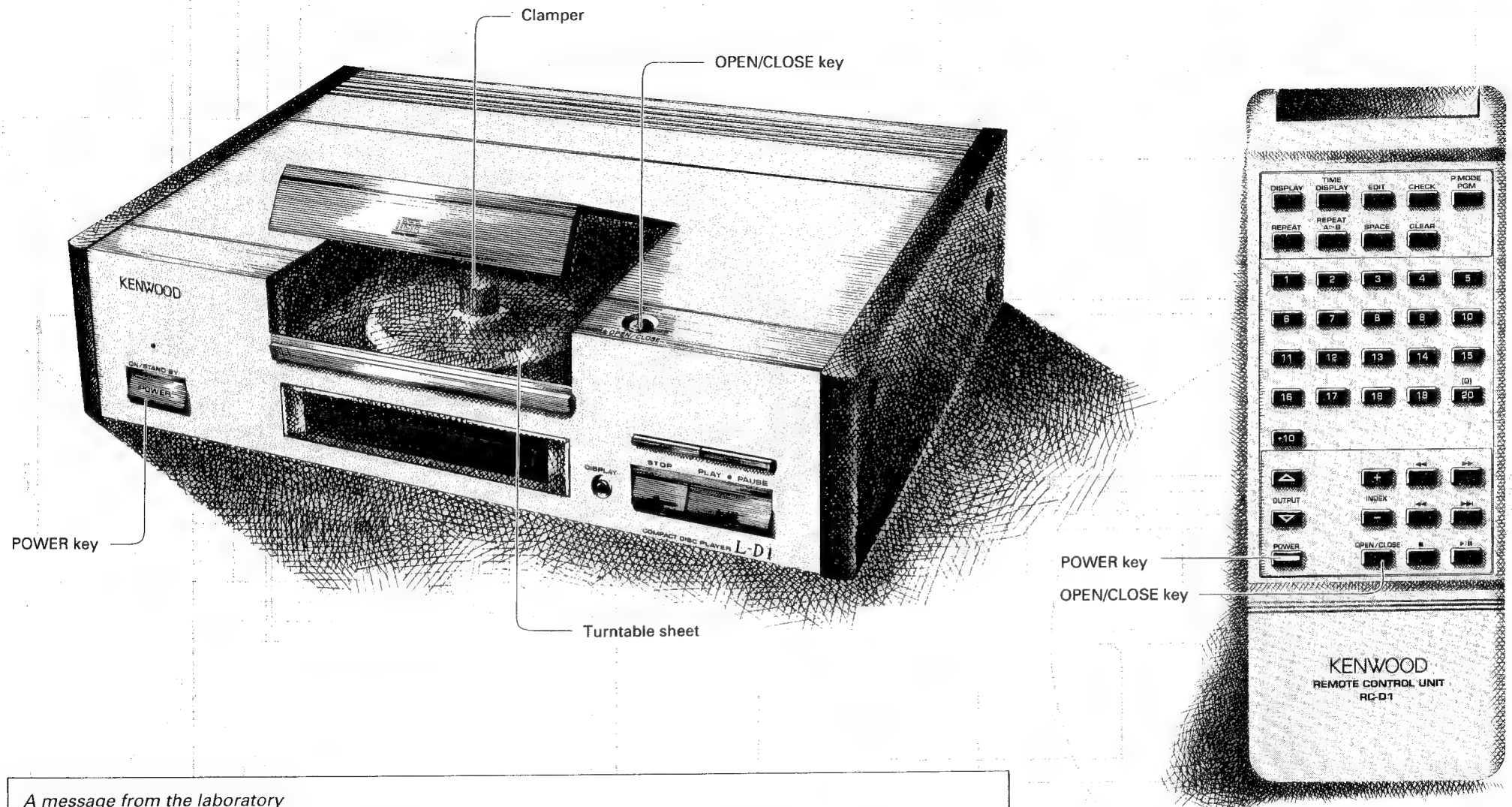
- 3 Close the cover.

Operating the remote control

Hold the remote control with the top of the unit facing the remote control signal detector and press the keys. The remote control may be operated within the area shown in the diagram below. When pressing keys continuously or in sequence, press each key firmly and wait approximately one second before pressing the next key.



How to insert a disc

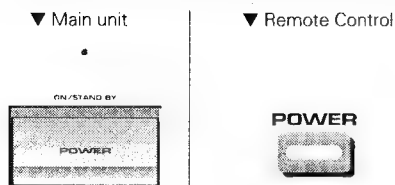


A message from the laboratory

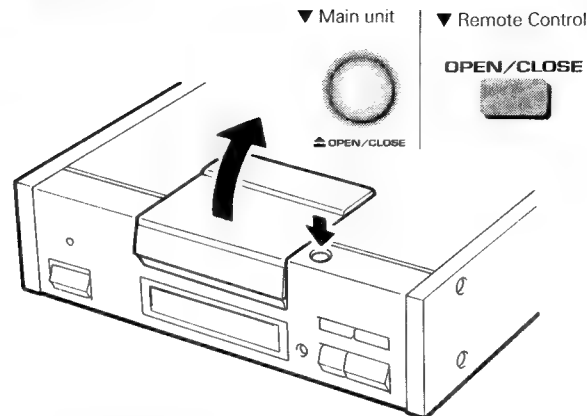
The L-D1's low impedance drive

The main obstacle to reproducing pure, clear sound is external noise. To transmit audio signals to the amplifier without being corrupted by this external noise, you have to produce low-impedance output. That's why in developing the L-D1 we decided not to use any of the existing operational amplifier, instead using the same circuitry as that which we used in the Kenwood L-A1, allowing us to create a system where all the post-DAC circuitry is separate and discrete from the rest of the system. These circuits allowed us to reduce external noise to the lowest possible levels, and enabled us to create a drive with incredibly low impedance.

1 Press the **POWER** key to turn on the power.

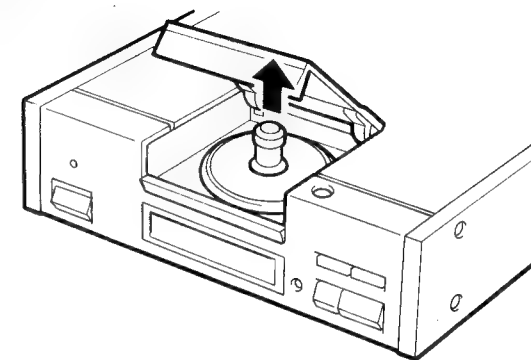


2 Press the **OPEN/CLOSE** key to open the lid of the player.



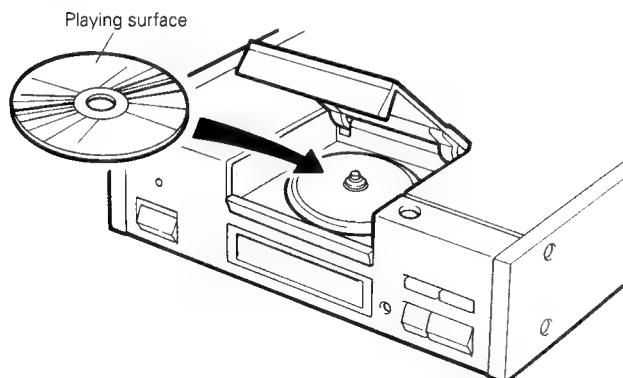
- You can set the angle at which the lid opens using the **DOOR POSITION** switch (see page 11).
- Do not interfere with the movement of the lid when it is opening or closing as you may damage the machine.

3 Remove the clamber.



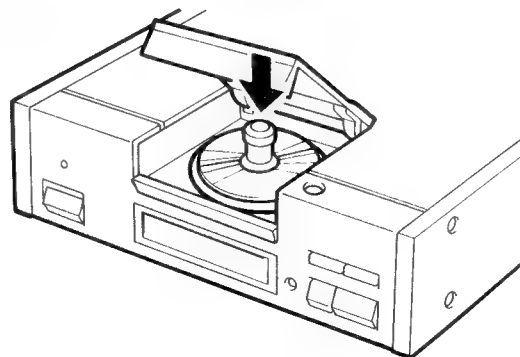
- Note that the clamber is not set into the player when the product is shipped from the factory.

4 With the playing surface of the disc facing upwards, place the disc on the turntable.



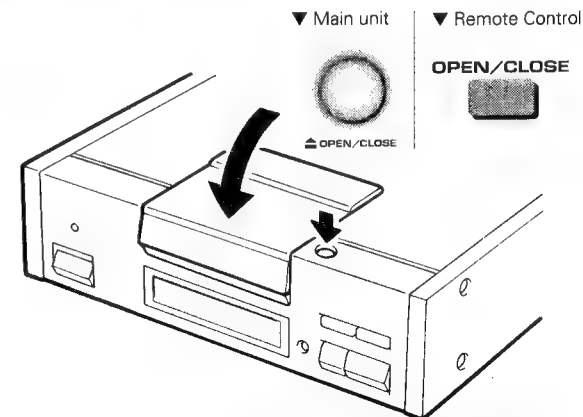
- Do not place anything other than CDs on the turntable.
- Do not use any sheet other than that which comes with your L-D1. Also do not place two CDs onto the turntable at the same time.

5 Place the clamber down over the disc.



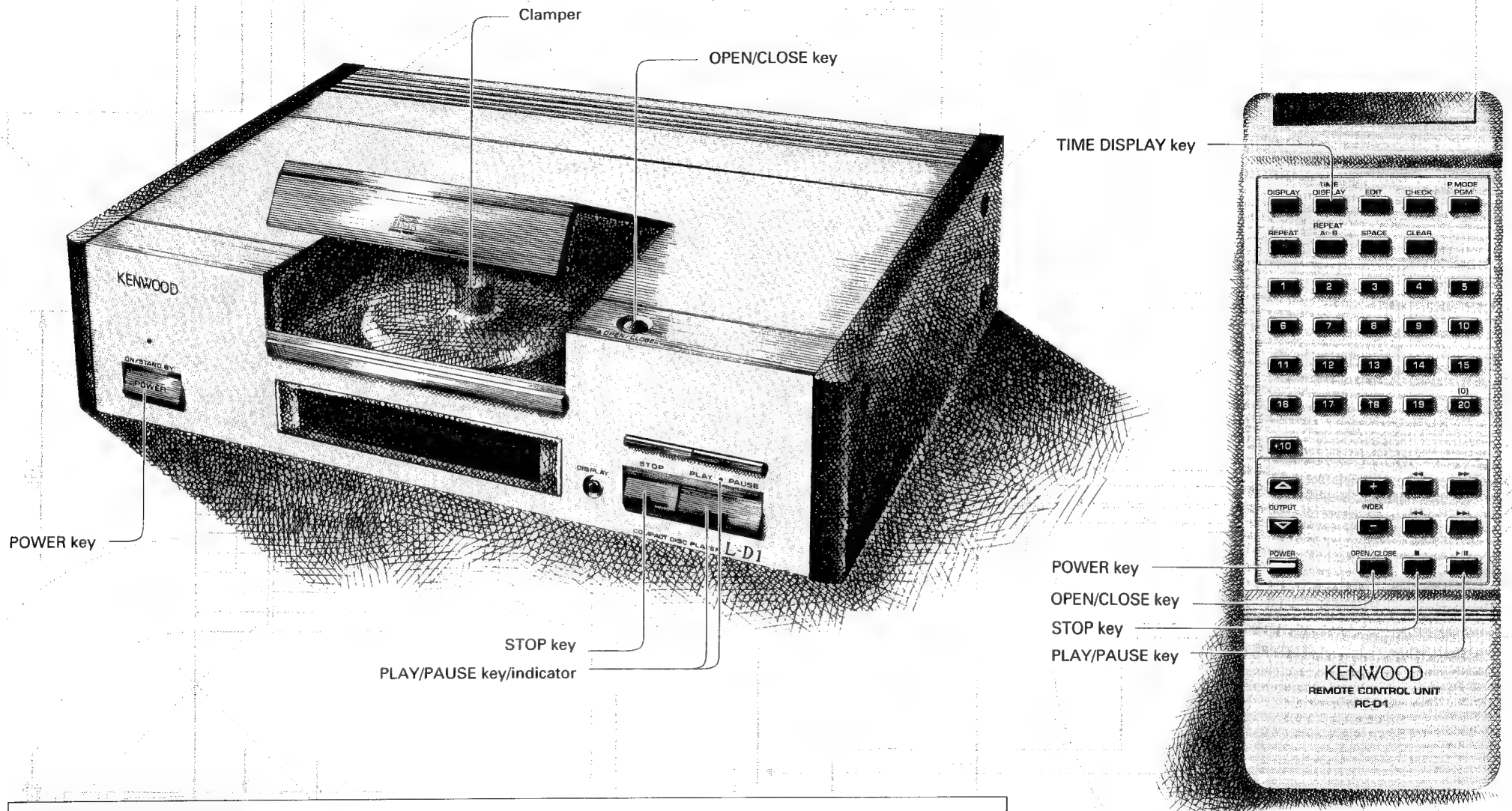
- Do not use any clamber other than that which came with your L-D1.

6 Press the **OPEN/CLOSE** key to close the lid of the player.



- Be careful not to catch your fingers or other objects in the lid when closing.
- If the clamber has not been placed down over the disc, the **NO CLAMP** message lights up on the display and the player stops. If you see this message, place the clamber over the disc and shut the lid again.

How to play a disc



A message from the laboratory

Newly designed clock circuits

The most important element in guaranteeing accurate playback and quality sound is, without a question, an advanced high-precision master clock. In designing the Kenwood L-D1 we repeatedly designed and tested a wide number of different circuits for use in this master clock, in search for the best technology available.

■ Playing a disc

1 Press the **POWER** key to turn on the power.

▼ Main unit



▼ Remote Control



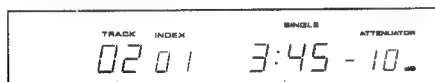
- If the PGM indicator is lit, press the **P. MODE PGM** key to turn it off.
- If you turn on the power with a disc inserted, playback starts automatically.

4 Press the **PLAY/PAUSE** key to start playback.

▼ Main unit



▼ Remote Control

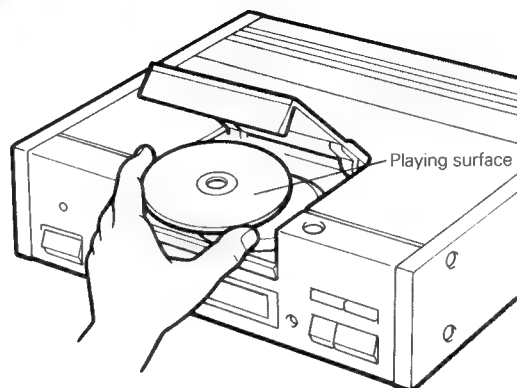


Current track number

Time elapsed for current track number

- The indicator lights up and after a few seconds playback starts from the first track on the disc.

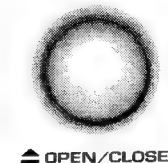
2 Open the lid of the player and insert a disc.



- Please see "How to insert a disc" on page 14.

3 Place the clamper over the disc and close the lid.

▼ Main unit



▼ Remote Control



Pausing playback

Press the **PLAY/PAUSE** key.

▼ Main unit



▼ Remote Control

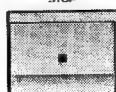


- The PLAY/PAUSE indicator blinks.
- To turn off pause mode, press the **PLAY/PAUSE** key again.

Stopping playback

Press the **STOP** key.

▼ Main unit

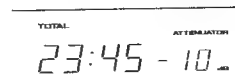


▼ Remote Control



The **TIME DISPLAY** key

To display the elapsed time or time remaining for a disc or track, press the **TIME DISPLAY** key. The display changes each time you press the key, as shown in the diagram. When you playback track 36 or higher, '---' is displayed for the remaining time (remaining SINGLE TIME) of the current track.



SINGLE TIME

① Elapsed time of current track

1:23

SINGLE TIME

② Remaining time of current track

-2:37

TOTAL TIME

③ Total elapsed time from start of disc

23:45

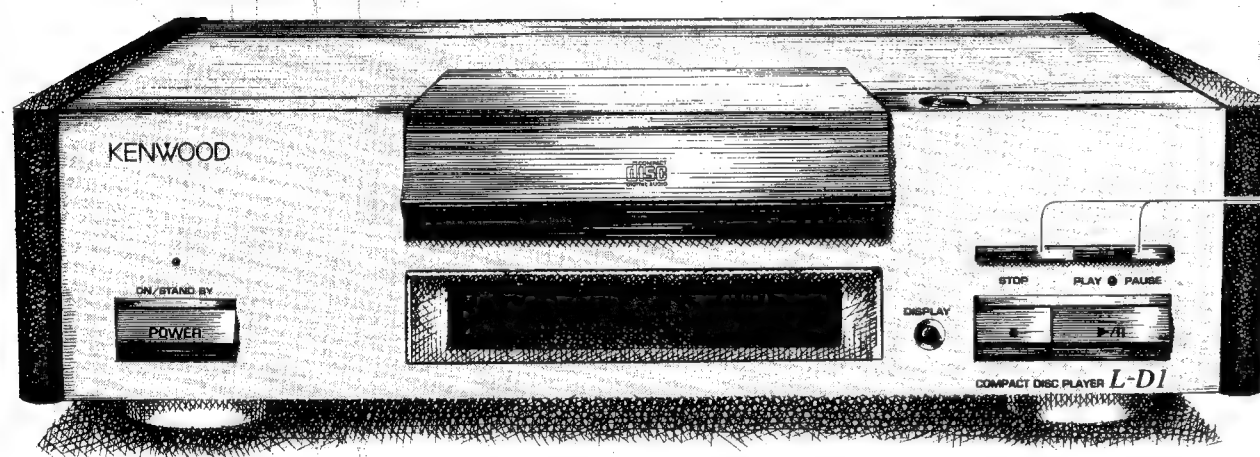
TOTAL TIME

④ Total remaining time for disc

-36:1

SAMPLE
DISPLAY

How to play a disc



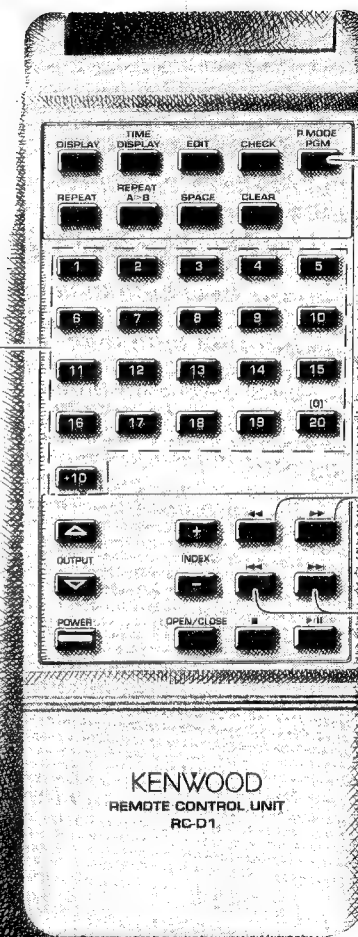
Numeric keys
1 - 20/0, +10

SKIP keys

P. MODE
PGM key

SEARCH keys

SKIP keys



A message from the laboratory

The new turntable used in the L-D1

The Kenwood L-D1 uses a special turntable with a three-phase brushless motor that stabilizes wobbling, resonance, and inertial momentum to increase the stability of pickup tracking and improve the quality of the sound. In addition, we spent months in selecting the focus, tracking, sled, and spindle servos until we succeeded in producing sure, steady operation.

■ Playing your favorite track

Using the skip key

Press the **SKIP** key to select the track from which you want to start.

▼ Main unit



▼ Remote Control



- To advance the player to the next track on the disc press the **SKIP** key (▶▶).
- If you press the **SKIP** key (◀◀) while a disc is being played, the player returns to the start of the current track. Pressing it again returns the player to the previous track.
- Pressing the **SKIP** key continuously advances or returns the player over multiple tracks.

Using the numeric keys (remote control only)

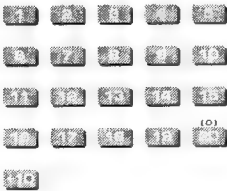


Confirm that the PGM indicator is off.

- If the PGM indicator is lit, press the **P. MODE PGM** key to turn it off.



Use the **numeric** keys to specify the track number to be played.



Example:

To select track number 23, press **+10** twice followed by **3**.
To select track number 40, press **+10** four times, followed by **20(0)**.

- **20(0)** is used to select track number 20 or to specify the zero in '30' or '40' when specifying track number 30 or 40.
- Playback starts from the track specified.

Using the search keys (remote control only)



Use the **SEARCH** keys to select the track from which you want to start.



- To increase the search speed, hold down the **SEARCH** key.
- Playback starts when you release the **SEARCH** key.

The EMPHASIS indicator

Starting playback of a song recorded with pre-emphasis (high frequency emphasis), automatically activates the de-emphasis (high frequency compensation) circuitry and the EMPHASIS indicator lights up.

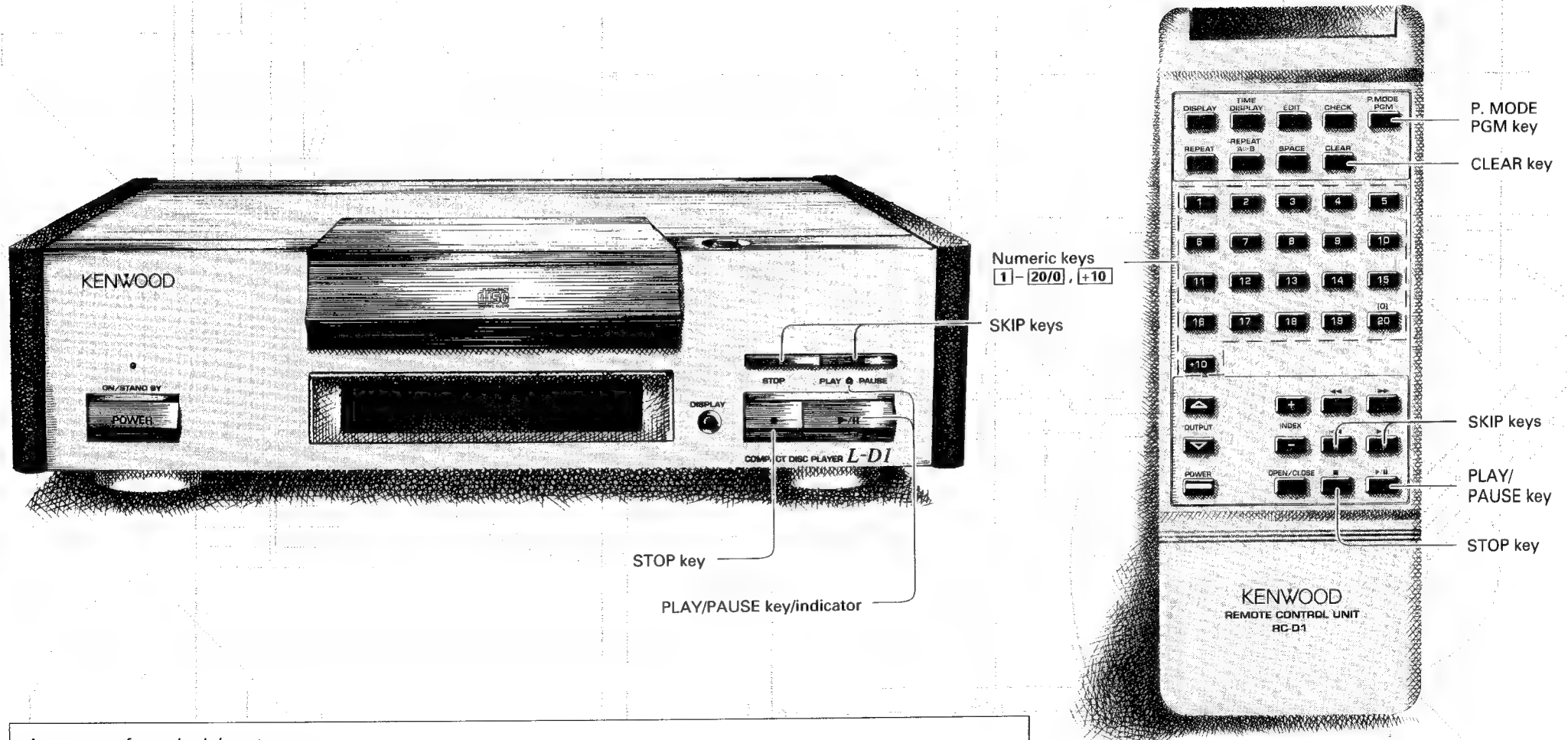


Notes

- If you select a track number that does not exist on the disc, with the lid open, the final track on the disc is played.
- You cannot specify a nonexistent track number once the lid has been closed or playback has started.

How to program playback

You can select up to 24 tracks to program in any sequence.



A message from the laboratory

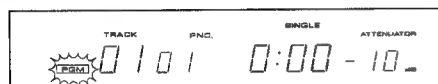
Discrete power amplifiers

To assure the best characteristics for the focus and tracking servo drives, as well as the best possible sound, we've used discrete power amplifiers in all the actuator drives of the Kenwood L-D1. We spent weeks poring over circuit pattern diagrams, in selecting the components to be used in our circuit designs, and in analyzing the current in the circuitry, until we could be sure of delivering the kind of high quality sound that you deserve.

■ Playing a program [PGM mode] remote control only

1 Press the **P. MODE PGM** key on the remote control to enter program mode.

- The PGM indicator lights up.

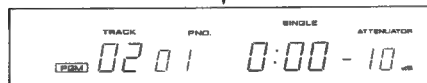
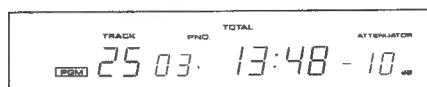


2 Use the **numeric** keys to specify the number and sequence of the tracks you want to play.



Example:

To select tracks 2, 5, and 25 press **[2]**, **[5]**, **[+10]**, **[+10]**, **[5]**.



- You can select up to 24 tracks. If you select 25 or more tracks 'FULL' appears on the display.
- If you make a mistake in entering a track number, press the **CLEAR** key and specify the track number you want to play again.
- You can also select tracks while the lid is open, allowing you to view the disc label and make your selection.
- If you select track number 36 or higher, the program total time is not displayed.

3 Press the **PLAY/PAUSE** key to start program playback.



- Playback starts in your programmed order.
- Use the **SKIP** keys (**[<<]**, **[>>]**) to play the next or previous program.

To return to normal playback mode.

Press the **P. MODE PGM** key again.

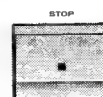


- The player returns to normal mode, playing from the current track.

Stopping a program.

Press the **STOP** key.

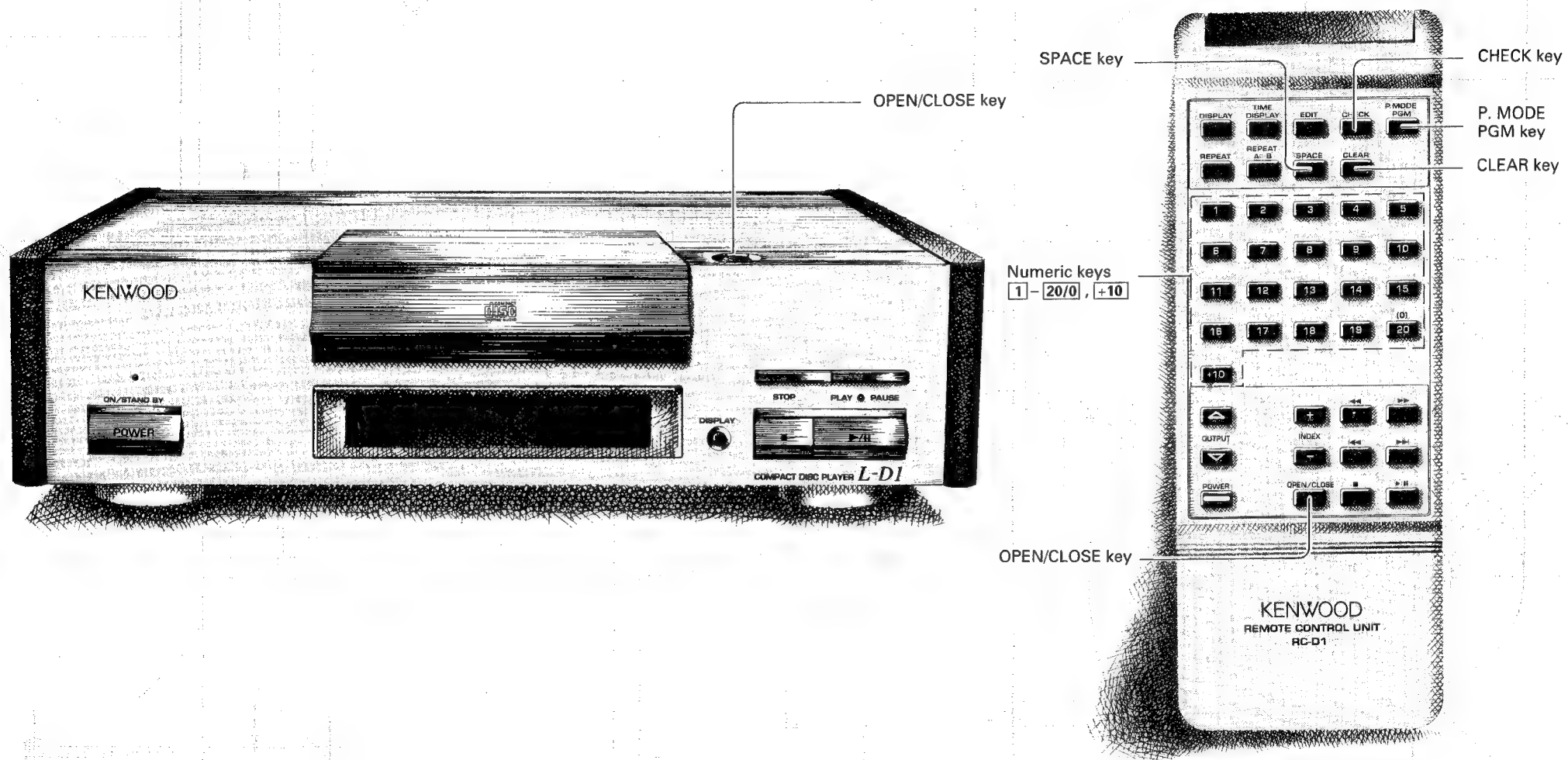
▼ Main unit



▼ Remote Control

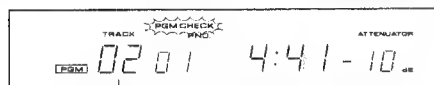


How to program playback



Checking a program (remote control only)

Press the **CHECK** key.

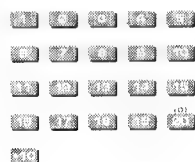


Track number

- Press the **CHECK** key to display the program order, track number and the total time up until the selected track.
- After a few seconds, the display returns to its original state.

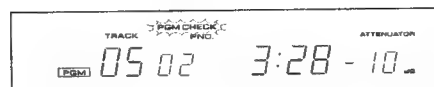
Adding to a program (remote control only)

Use the **numeric** keys to select the number of the track you want to add.



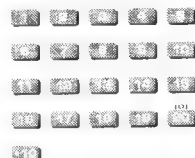
Modifying a program (remote control only)

Press the **CHECK** key.



Press the **CHECK** key repeatedly until you come to the number of the track you want to modify.

Use the **numeric** keys to specify the new track number.



This should be entered while the PGM CHECK indicator is lit.

- Note that you cannot modify a program currently being played.

Erasing a program

To erase the last program in sequence
(remote control only)

Press the **CLEAR** key.



- Each time you press the **CLEAR** key, one program is erased starting from the last program in sequence.
- Note that you cannot modify a program currently being played or any programs which have already been played.

Erasing all programs

Press the **P. MODE PGM** key.

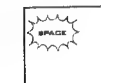


- Pressing the **OPEN/CLOSE** key to open the lid also erases all programs.

Inserting a space between tracks

Press the **SPACE** key.

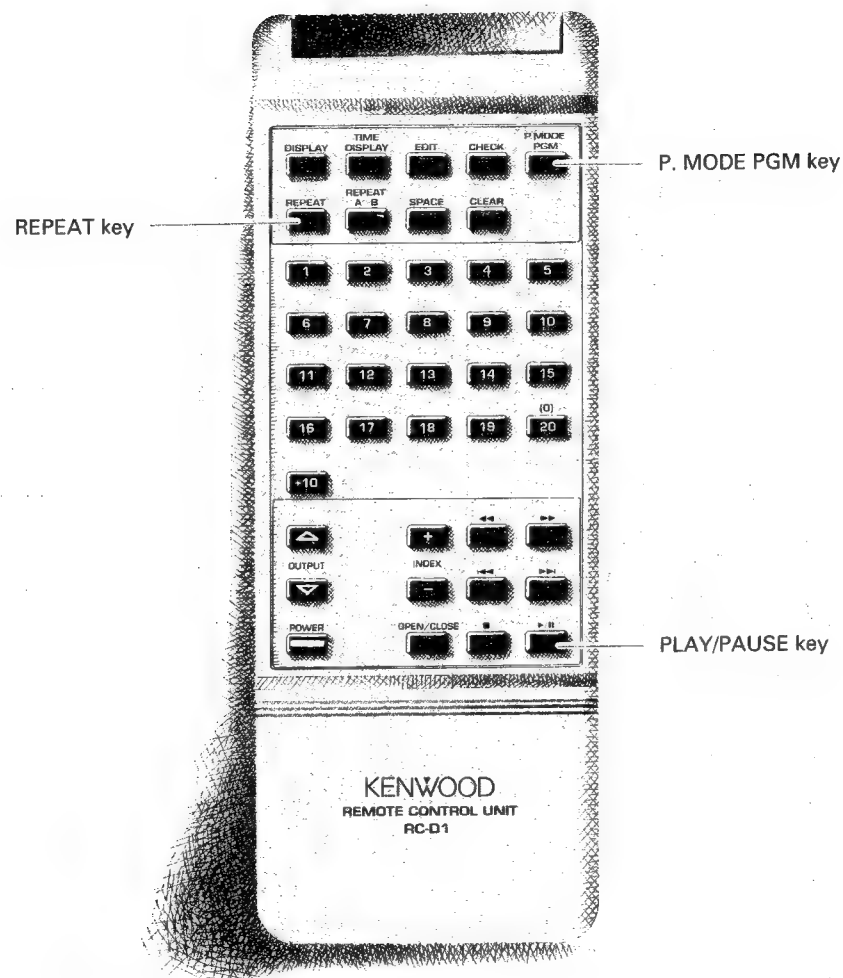
Pressing the **SPACE** key inserts an interval of about four seconds in between tracks. This function is intended for use with cassette deck DPSS systems, but can also be used for music with no intervals between works such as classical or live music.



- When the player is in program mode, the total required time includes the time specified for space intervals.
- To release space mode, press the **SPACE** key again.

How to repeat playback

remote control only



A message from the laboratory

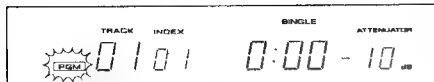
The new Kenwood L-D1 turntable mechanism

The most important element of a CD player is its turntable. The turntable must be capable of playing discs smoothly and accurately without the disc wobbling or losing its center of balance. That's why we chose a turntable mechanism where the disc is set into a machined-out aluminum turntable like those used in analog record players and then fixed the turntable directly to a high-torque brushless motor. We exercised the same care in selecting the sheet which covers the turntable, trying a host of different materials, repeating test after test and listening to each until we found the one that can deliver you the best possible sound.

■ Playing a track repeatedly

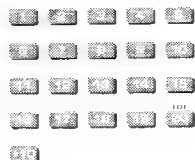
- 1 Press the **P. MODE PGM** key on the remote control to enter PGM mode.

P. MODE
PGM



- The PGM indicator lights up.

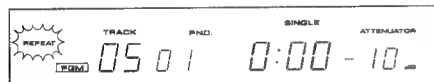
- 2 Use the **numeric** keys to specify the number of the track you want to play.



- The selected tracks are played repeatedly.
- If you only select one track, that one track is played repeatedly.

- 3 Press the **REPEAT** key.

REPEAT



- 4 Press the **PLAY/PAUSE** key to start playback.



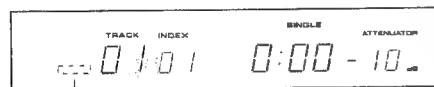
To return to normal playback mode.

Press the **REPEAT** key again.



■ Playing a disc repeatedly

- 1 Confirm the PGM indicator is off.

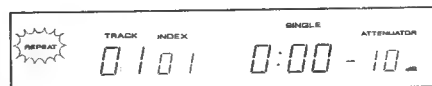


Off

- If the PGM indicator is lit, press the **P. MODE PGM** key to turn it off.

- 2 Press the **REPEAT** key.

REPEAT



- 3 Press the **PLAY/PAUSE** key to start playback.



To return to normal playback mode.

Press the **REPEAT** key again.



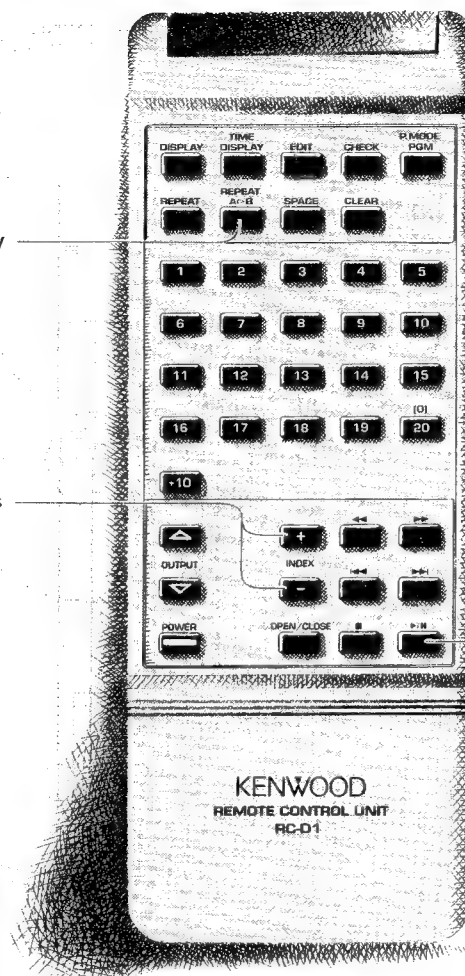
How to repeat playback

remote control only

REPEAT A > B key

INDEX keys

PLAY/PAUSE key



A message from the laboratory

The L-D1's top loading system

In order to get the most out of a turntable we designed to be the very best, we tried to take away everything that was unnecessary. We decided not to use an ordinary disc tray, instead replacing it with a top loading turntable where the disc would be set onto the turntable and clamped securely down. And that's why we chose a simple pop-up lid.

But even in selecting a simple lid, we've exercised the greatest care—made of aluminum and weighing over 500 grams, we did everything we could to make sure that it operated smoothly and quietly, changing our design dozens of times until we reached the final mock-up that met our standards.

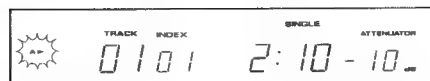
To remove the interference from outside light which can detract from CD sound quality, we conducted special tests where we inserted a miniature lamp inside the lid, closed it, and took the machine into a darkroom where we could see whether or not light was escaping the slit around the lid, allowing us to create a perfect seal that blocks all outside interference.

■ Playing a selected portion (Interval repeat)

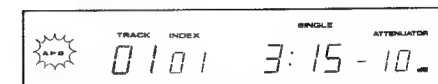
1 Press the **PLAY/PAUSE** key to start playback.



2 Press the **REPEAT A ▷ B** key to indicate the start of the portion you want repeated.



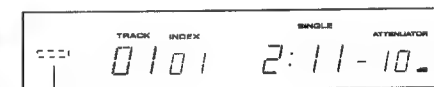
3 Press the **REPEAT A ▷ B** key to indicate the end of the portion you want repeated.



- Repeat playback of the specified portion starts.
- The specified end point B may exceed the track number. This allows you to specify a number several tracks ahead.
- Note that you cannot specify repeat play over more than one track when in PGM mode.

To return to normal playback mode.

Press the **REPEAT A ▷ B** key again.



Off

Indexed playback

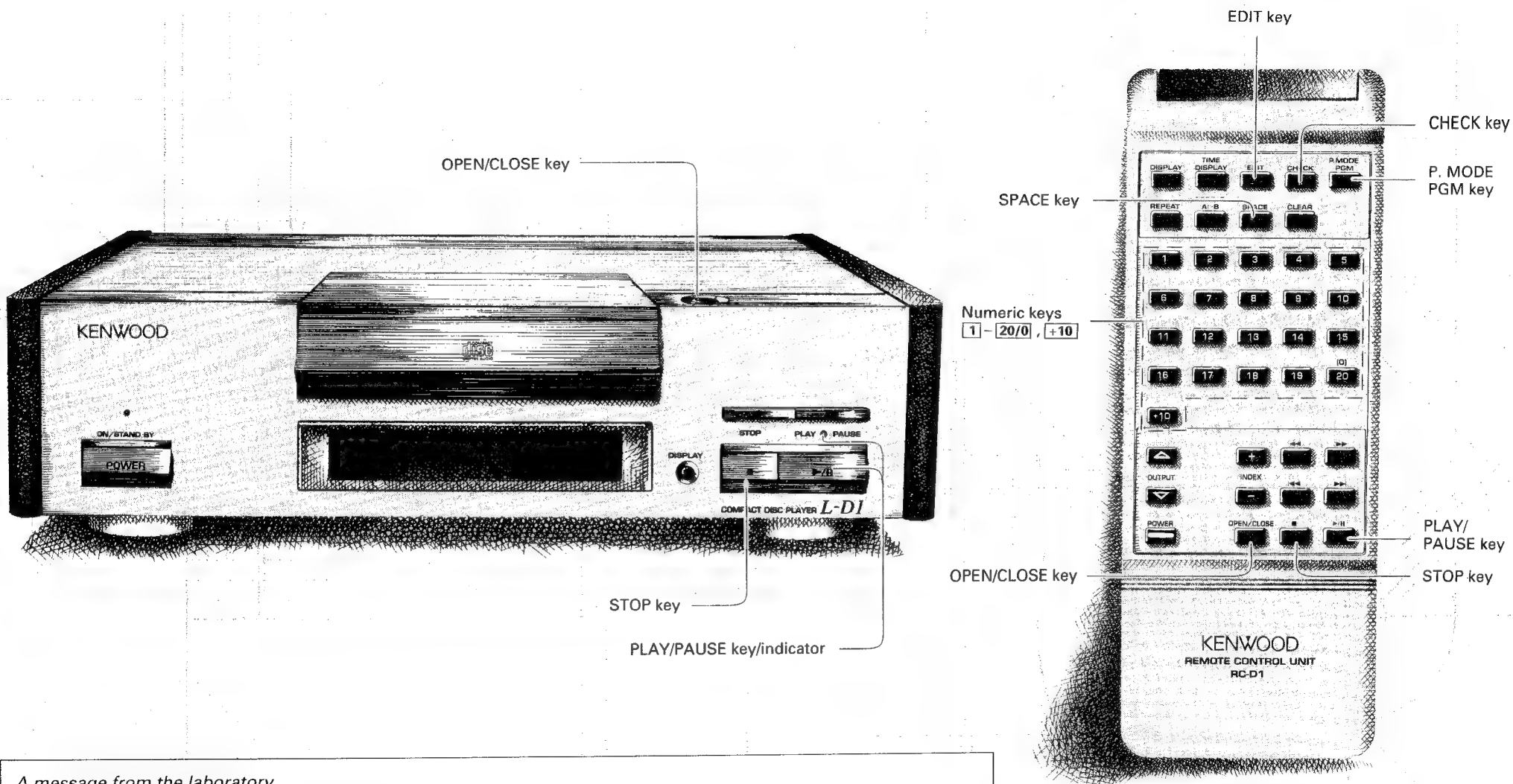
In popular medleys or in classical music, individual tracks are sometimes recorded as separate portions, each assigned its own index number. On discs with these index numbers, you can begin playback from the start of an indexed portion in the middle of a track by pressing the **INDEX** key (⏮/⏭) during playback or when the player is in pause mode.

- Even when the specified index number is not recorded on the disc, pressing the **INDEX** key still changes the index number on the display. Releasing the **INDEX** key, however, returns the disc to index number 01 and begins playback from the start of the track.



How to edit

Editing allows you to specify a time, when recording from a CD to a cassette tape, to prevent cutting off tracks at the end of the tape.



A message from the laboratory

The fixed mechanism of the L-D1

In conventionally designed CD players, the pickup and turntable must be separated from the chassis by springs or rubber to prevent the transmission of extraneous vibration which might block the reception of micron-order signals. The L-D1, however, shuts out extraneous vibration through a sturdy, heavy-weight design that includes a mechanism created from a highly stable machined-out aluminum frame fixed directly into the chassis. We even tested dozens of different screws to find the ones that could hold the mechanism firmly in place to deliver the best possible sound, with the kind of power that washes over you like a revelation.

■ Editing

remote control only

1 With the CD stopped, press the **EDIT** key on the remote control.



- Step (2) must be performed while the **EDIT** indicator is lit.
- When you want to leave a four-second blank interval before each track, first press the **SPACE** key then the **EDIT** key.

2 Use the **numeric** keys to specify the length (in minutes) of the tape you want to record on.



Example:

For a 46-minute tape, press **+10** four times and then **6** once.

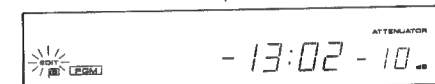
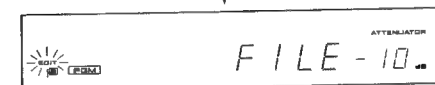
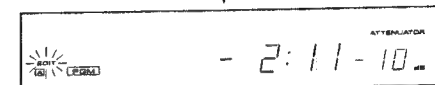
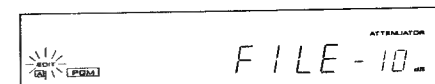
For a 30-minute tape, press **+10** three times and then **20(0)** once.

- Note that you cannot specify a time in excess of 99 minutes.

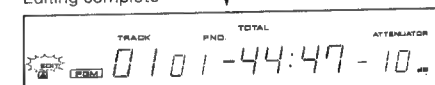
1. The specified time is halved then tracks are automatically selected, in ascending order from the lowest to highest, to fit into file A (i.e., side A of the tape).

2. After a few seconds the remaining time for file A appears on the display, followed by the same procedure for file B (i.e., side B of the tape).

Editing in progress



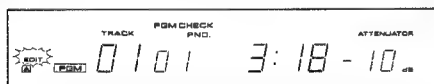
Editing complete



Checking your editing

(remote control only)

- Press the **CHECK** key on the remote control.

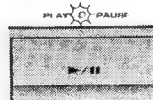


- Each time you press the **CHECK** key track numbers are displayed one by one in order, from the first track on side A to the last track on side B.

Playing your edited sequence

- Press the **PLAY/PAUSE** key to start playback.

▼ Main unit



▼ Remote Control



- The tracks in file A are played in order, and the program pauses at the start of file B.
- To resume playing file B, press the **PLAY/PAUSE** key again.

Erasing all editing

- Press any keys.

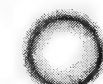
▼ Remote Control



▼ Remote Control



▼ Main unit



▲ OPEN/CLOSE

Program selection and editing

If you edit after you have programmed a specific track, the programmed track is edited first. If time remains on the tape beyond the time which you specified, then those tracks which have not been programmed are added automatically.

Notes

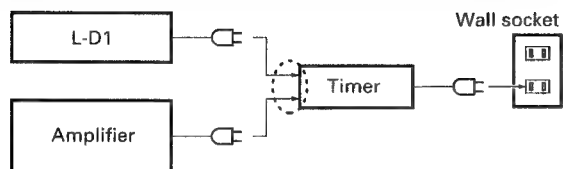
- If you use a tape with a different length than the specified time, recording is still performed. However, blank spaces may appear on the tape, or the last track on side A or B may be cut off.
- A maximum of 24 tracks may be edited at one time.
- Editing may not be performed correctly for discs with only a single track or when recording music such as classical music, where the playing time for each track is exceptionally long.
- If you press the **STOP** or **OPEN/CLOSE** key during editing, EDIT mode is terminated.

How to set the timer

Your Kenwood L-D1 includes a built-in **TIMER STAND BY** function that, when used together with an ordinary commercial audio timer function, allows you to listen to your favorite music at a pre-specified time.

■ Setting timed playback

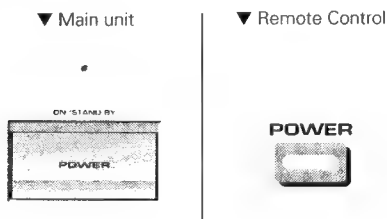
1 Connect the power plugs into the sockets.



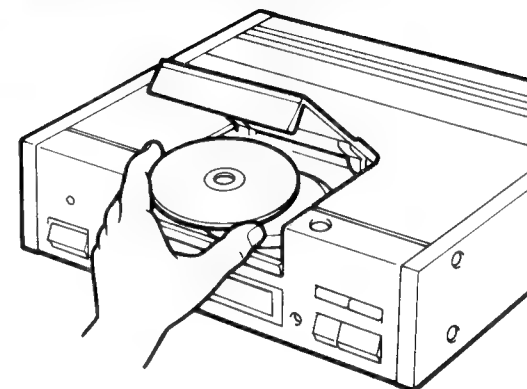
- The power cords for the amplifier and the L-D1 should be inserted into the corresponding timer sockets (i.e., switched equipment that can be turned on and off).
- Please carefully read the instruction manual that comes with your timer.

2 Turn on the power for the amplifier.

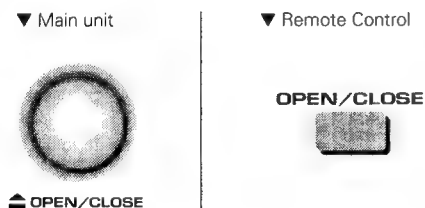
Press the **POWER** key on the player to turn on the power.



3 Insert a disc into the player.



4 Close the lid of the player.



5 Set the time at which you want the timer to switch on.

- Be sure that the power for the L-D1 and amplifier is on before setting the timer.
- Playback starts from the time you have set on the timer.
- Be careful in setting the volume on the amplifier. (Excessive volume can lead to speaker damage.)

The **TIMER STAND BY** function

The **TIMER STAND BY** function allows the L-D1 to retain in memory the status of the **POWER** key (i.e., whether it is on or off) even when the power is off, thus allowing the player to restore the original status when the power is switched on. If power is restored when the **POWER** key is in the ON position and a disc is in the drive, then playback starts automatically. If the **POWER** key is in the OFF position when the timer was set, then it is set to OFF when the power comes on, and the disc is not played.

Notes

- Some amplifiers are not designed to allow the use of timers. Please check the operation of your amplifier beforehand.
- The timer can retain the set time for approximately one week after its power is turned off or after its power plug is removed from its socket. Note that if power is restored to the timer after the set time has been lost, the L-D1 will not be switched on. Please do not set a timer if it is not to be powered on for several days at a time.

Troubleshooting

Before you contact your service representative, check the following list.

MAIN UNIT

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
The power won't come on when you press the POWER key	<ul style="list-style-type: none"> Power cord isn't properly inserted into its socket. Power plug of the L-D1 is inserted into the switched socket of the amplifier but the power for the amplifier isn't turned on. 	<ul style="list-style-type: none"> Insert the power cord properly into its socket. Turn on the amplifier.
You insert a disc but playback fails to start	<ul style="list-style-type: none"> The disc is inserted upside down. The disc isn't inserted properly. The disc is dirty or smudged. The disc is scratched. There is condensation on the light sensor. The clamper isn't placed on top of the disc. 	<ul style="list-style-type: none"> Reverse the disc to bring the recorded side up and insert it again. Insert the disc correctly. Check the procedure in "Before operation-Handling discs" (page 8) and clean the disc. Replace the disc. Check the section on "Before operation-Condensation" (page 9) and dry out the player Place the clamper properly down over the disc.
No sound	<ul style="list-style-type: none"> No disc in the player. Playback mode isn't set. The disc is dirty or smudged. The disc is scratched. The cables are not connected properly. 	<ul style="list-style-type: none"> Check the section on "How to insert a disc" (page 14) and insert a disc. Press the PLAY/PAUSE key. Check the procedure in "Before operation-Handling discs" (page 8) and clean the disc. Replace the disc. Check the section on "How to set up your new L-D1" (page 10) and reconnect the cables correctly.
The sound skips	<ul style="list-style-type: none"> The disc is dirty or smudged. The disc is scratched. The player is being affected by outside vibrations. 	<ul style="list-style-type: none"> Check the procedure in "Before operation-Handling discs" (page 8) and clean the disc. Replace the disc. Move the player to a location free of vibrations.
Turning on the player starts playback automatically	<ul style="list-style-type: none"> There is no cause to worry. The L-D1 is designed to start up automatically if power is turned on with a disc already inserted. 	<ul style="list-style-type: none"> If you don't want playback to start automatically, remove the disc from the player before turning on the power.

Troubleshooting

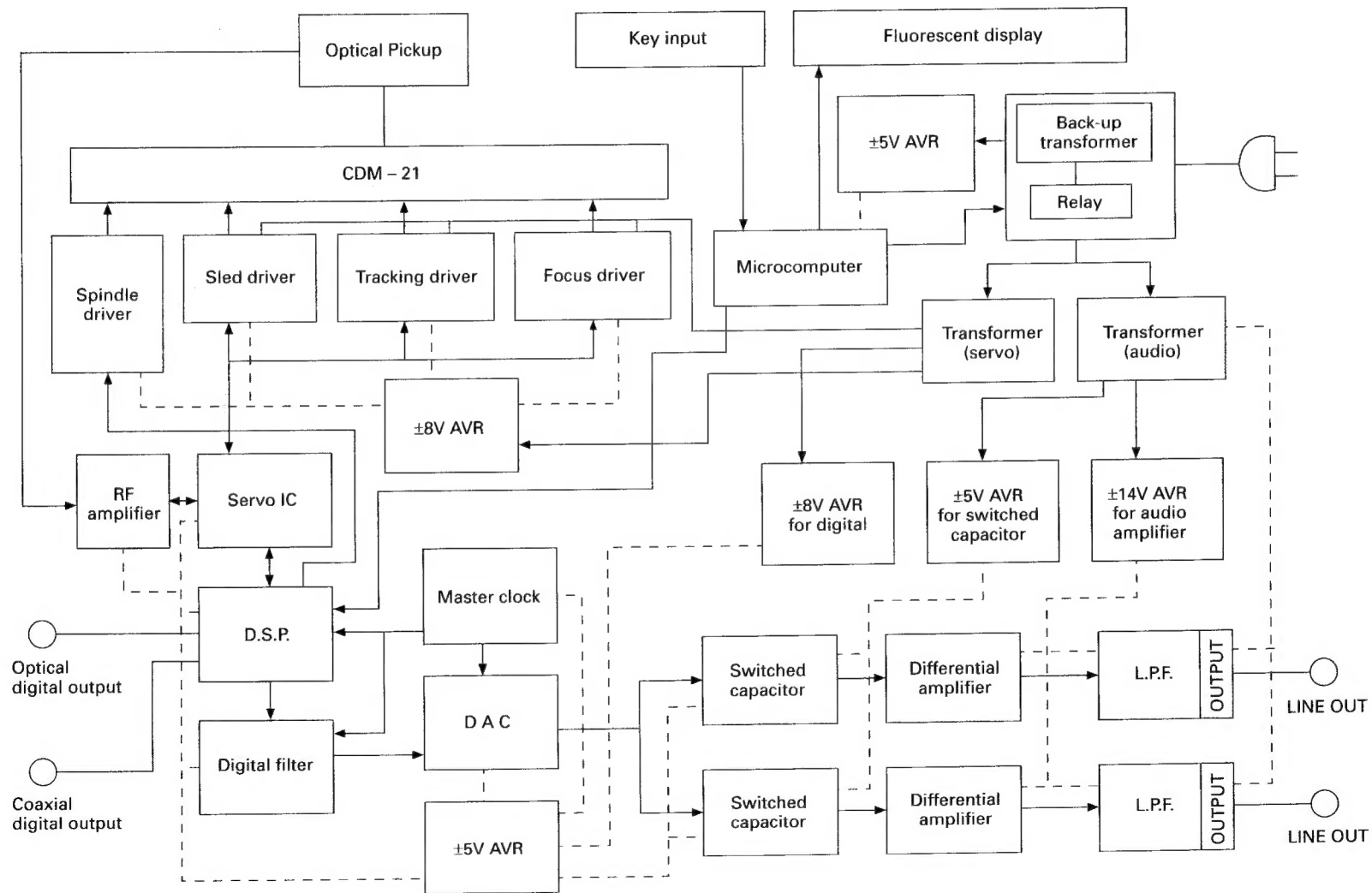
REMOTE CONTROL UNIT

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
The remote control unit doesn't work	<ul style="list-style-type: none">• No batteries inside.• Batteries are inserted in the wrong direction.• Batteries are dead.• You are too far away from the main unit or if you are trying to operate the remote control at too sharp an angle. Also check to be sure that nothing is in the way.	<ul style="list-style-type: none">• Replace both batteries. (See page 13.)• Check the orientation of the batteries and insert them again in the proper direction.• Replace both batteries.• Try using the remote control again, but within the designated area. (See page 13.)

Notes

- The Kenwood L-D1 uses a microprocessor that may be subject to external noise or interference which would cause the L-D1 to function improperly. If this happens, remove the power cord from its socket and try the machine once more.
- Do not use glues and fixatives to restore electrical connections may result in damage to your CD player. Solutions containing oils are particularly dangerous, as they may cause the distortion of plastic parts.

Block diagram



Specifications

Format

System	Compact disc digital audio system
Laser	Semiconductor laser
Number of channels	2 channels
Playing rotation.....	200 rpm ~ 500 rpm (CLV)

D/A converters

D/A conversion	1 Bit
Oversampling	8 fs (352.8 kHz)

General

Power consumption	40W
Dimensions	W: 476 mm
	H: 128 mm
	D: 430 mm
Weight (Net)	20 kg

Audio

Frequency response	4 Hz ~ 20 kHz \pm 0.2 dB
Signal to noise ratio	more than 108 dB
Dynamic range	more than 100 dB
Total harmonic distortion	less than 0.001 % (at 1 kHz)
Channel separation	more than 100 dB (at 1 kHz)
Wow & flutter	unmeasurable limit
Output level / impedance	
Variable	2.5V / 0.1 Ω
Digital output	
Coaxial	0.5Vp-p / 75 Ω
Optical	-15 dBm ~ -21 dBm
	(wave length 660 nm)

Please note that product specifications and design may be subject to change without notice.